



Class	Cycle	Autumn	Spring	Summer
N/R	A	<p>Computer Systems & Networks – Technology All Around Us</p> <ul style="list-style-type: none"> • Explore and talk about everyday technology (e.g. phones, microwaves, tablets, cameras). • Recognise that computers and devices have parts (buttons, touchscreens, keyboards). • Use classroom technology (e.g. interactive whiteboard) with support. • Begin to understand simple rules for using equipment safely. • Develop vocabulary to name familiar devices. • Share devices fairly with others 	<p>Creating Media – Digital Mark Making</p> <ul style="list-style-type: none"> • Use a tablet or whiteboard to make marks with digital paint tools. • Select simple colours and shapes. • Compare digital mark making to drawing on paper. • Talk about their choices (“I used red for the flower”). • Save or show work to an adult or peers. • Learn to use tools respectfully (not deleting others’ work). 	<p>Programming – Programmable Toys</p> <ul style="list-style-type: none"> • Explore programmable toys (e.g. Bee-Bots). • Give simple instructions (forwards, backwards). • Predict what will happen before pressing start. • Spot and fix simple mistakes (debugging). • Sequence 2–3 instructions in a row. • Work with a friend to share turns and ideas.



	<p>B</p>	<p>Computer Systems & Networks – Using Technology Safely</p> <ul style="list-style-type: none"> • Identify ways they use technology at home (TV, tablets, smart speakers). • Talk about rules for safe use (ask an adult before using). • Recognise that devices can store photos or drawings. • Begin to understand about personal information (names, pictures). • Show how to carry and use devices carefully. • Learn who to go to if they feel worried. 	<p>Data & Information – Sorting & Grouping</p> <ul style="list-style-type: none"> • Sort objects by colour, size, shape (unplugged). • Make simple pictograms with physical objects (e.g. blocks, counters). • Compare which group has more/less. • Use a digital tool (e.g. pictogram app) to show a result. • Talk about what the data tells us (“more people like apples”). • Link data work to real-life choices (favourite fruit, pets) 	<p>Programming B – Unplugged Algorithms & Stories</p> <ul style="list-style-type: none"> • Follow instructions in daily routines (algorithm = step by step). • Give instructions to a friend (“clap, jump, turn”). • Use sequencing in role play (making a sandwich, getting dressed). • Spot when instructions don’t make sense and fix them (debugging). • Use a story (e.g. The Hungry Caterpillar) to order steps. • Begin to link stories and algorithms together.
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1/2	A	<p>Computer Systems & Networks Technology Around Us</p> <ul style="list-style-type: none"> • Recognise and name examples of technology in school and at home (e.g. laptops, tablets, interactive whiteboards). • Identify and describe the main parts of a computer (keyboard, mouse, screen) and explain what they are used for. • Learn how to log in with a username and password, and why these must be kept private. • Practise saving and opening a simple piece of work, using correct file names. • Demonstrate how to use equipment safely, including carrying and shutting down devices properly. • Know who to ask for help if something goes wrong and understand the idea of using technology responsibly. 	<p>Creating Media-Digital Painting</p> <ul style="list-style-type: none"> • Explore how to use digital tools (brush, fill, shapes) to create a picture. • Select appropriate colours and brush sizes to express ideas. • Compare differences between painting on paper and on a computer. • Save, open, and edit digital artwork, explaining simple changes made. • Share work with others and explain choices in design. • Understand how to use digital creativity respectfully (not altering someone else’s work without permission). 	<p>Programming-Moving a Robot</p> <ul style="list-style-type: none"> • Understand that a set of instructions is called an algorithm. • Use directional commands (forward, backward, turn) to move a robot or sprite. • Plan a short sequence of steps to achieve a goal. • Spot and fix mistakes in instructions (debugging). • Predict the outcome of an algorithm before running it. • Work in pairs to explain thinking and show logical reasoning
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	<p>B</p>	<p>Computer Systems & Networks – IT Around Us</p> <ul style="list-style-type: none"> • Identify uses of information technology (IT) at school, home, and in the wider world. • Understand how IT helps with everyday tasks (e.g. writing, shopping, communication). • Use keyboards and mice to create simple work on a computer. • Save, retrieve, and edit digital content using correct file organisation. • Discuss rules for responsible use of technology. • Begin to explain how to use technology safely and respectfully 	<p>Data & Information – Pictograms</p> <ul style="list-style-type: none"> • Collect and record simple data (e.g. favourite fruit, pets). • Use software to create pictograms and block graphs. • Answer questions by looking at data in charts. • Identify patterns in data (e.g. more/less than). • Compare computer-made charts with paper ones. • Explain how computers make working with data quicker and easier. 	<p>Programming – Programming Quizzes</p> <ul style="list-style-type: none"> • Build a simple quiz program using block-based coding. • Use events (e.g. button clicks) to make quizzes interactive. • Sequence questions and responses in the correct order. • Debug errors when the quiz doesn't work as expected. • Improve quizzes by testing and giving feedback. • Use logical reasoning to explain what a program will do.
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3/4	A	<p>Computer Systems & Networks – Connecting Computers</p> <ul style="list-style-type: none"> • Recognise digital devices and their main components. • Understand how devices use inputs, processes, and outputs. • Explore how devices connect together to make a network. • Identify how messages move between devices. • Explain advantages of connected computers. • Stay safe when using a network in school. 	<p>Data & Information – Branching Databases</p> <ul style="list-style-type: none"> • Group objects by asking yes/no questions. • Create and test a branching database on a computer. • Add and edit questions and answers in a database. • Use the database to find information efficiently. • Compare computer databases with paper-based methods. • Recognise why databases are used in the real world. 	<p>Programming A – Sequencing Sounds</p> <ul style="list-style-type: none"> • Use block-based coding to create music sequences. • Build algorithms with ordered instructions. • Use repetition to make musical patterns. • Spot and fix errors (debugging) in a program. • Refine sequences to improve sound quality. • Share and evaluate digital work with peers.
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	<p>B</p>	<p>Computer Systems & Networks – The Internet</p> <ul style="list-style-type: none"> • Understand that the internet is a network of networks. • Learn how the World Wide Web (WWW) is different from the internet. • Explore how information travels around the internet. • Understand risks of unreliable information. • Evaluate websites for reliability and purpose. • Apply strategies for staying safe online. 	<p>Creating Media – Photo Editing</p> <ul style="list-style-type: none"> • Open and adjust digital images. • Use tools to crop, rotate, and resize. • Change brightness, contrast, and colours. • Combine images for a specific purpose. • Evaluate whether edits improve the message of the image. • Understand how editing can mislead audiences. 	<p>Programming – Repetition in Games</p> <ul style="list-style-type: none"> • Use loops to repeat actions in programs. • Design and build a simple computer game. • Add sprites, events, and conditions. • Debug and refine errors in code. • Test and evaluate games with peer feedback. • Work responsibly when creating digital content.
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5/6	A	<p>Computer Systems & Networks – Systems & Searching</p> <ul style="list-style-type: none"> • Understand that computer systems are made of connected parts. • Learn how search engines store and index web pages. • Use keywords effectively in searches. • Understand how search results are ranked. • Evaluate if websites are trustworthy and reliable. • Recognise risks of misinformation online. 	<p>Data & Information – Flat-file Databases</p> <ul style="list-style-type: none"> • Create and use a flat-file database. • Use searches and filters to find information. • Create charts to represent database results. • Compare digital databases with non-digital systems. • Ask questions and find answers using structured data. • Identify real-world uses of databases (e.g. libraries, shops). 	<p>Programming A – Selection in Physical Computing</p> <ul style="list-style-type: none"> • Use a microcontroller to control devices. • Create programs using selection (if/then). • Combine inputs (e.g. sensors) with outputs (e.g. lights, motors). • Debug and refine programs to make them work correctly. • Link computing to real-world control systems. • Work safely with electronic components.
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	<p>B</p>	<p>Computer Systems & Networks – Communication & Collaboration</p> <ul style="list-style-type: none"> • Understand how data is transferred over the internet. • Work together using cloud-based tools. • Share and edit files in real time. • Recognise risks of online communication. • Demonstrate respectful behaviour when collaborating. • Know how to report concerns or problems 	<p>Creating Media – 3D Modelling</p> <ul style="list-style-type: none"> • Use 3D design software to create models. • Create and manipulate digital shapes. • Group and align objects to build structures. • Develop models to meet a design brief. • Evaluate 3D models for accuracy and effectiveness. • Recognise real-world uses of 3D modelling (e.g. architecture). 	<p>Programming – Sensing Movement (Y6)</p> <ul style="list-style-type: none"> • Use sensors to detect motion or input. • Create programs using variables to store values. • Connect inputs to outputs (e.g. lights, sounds). • Debug and refine sensing programs. • Apply programming to real-world scenarios. • Work responsibly with digital technology.
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